Report 3

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Critical Analysis Team comments on the Silo 3 bid evaluation process

August 14th, 1998

Fluor Daniel Fernald's Silos Project requested that the Critical Analysis Team (CAT) review the Silo 3 bid evaluation process. Since the bid evaluation process has not yet been completed, the CAT reviewed the status of the process as of August 13, 1998.

The primary focus of the CAT's review was the effectiveness of the process in evaluating and selecting qualified vendors, with an eye toward application of lessons learned from the Silos 1 and 2 Proof of Principle Testing procurement.

The CAT perceives the Silo 3 bid evaluation process as a significant improvement on the Silos 1 and 2 Proof of Principle Testing bid evaluation process. While the final vendor selection decision has not been made, the bid evaluation process appears to have been structured, rigorous and comprehensive, and will likely result in the selection of an acceptable contractor.

Observations

FDF appears to have recognized and credibly incorporated lessons learned from the Proof of Principle testing procurement. The CAT has observed the following improvements in this procurement process:

- Utilizing experts in specialty areas (technical, construction, etc.).[1]
- Placing a relatively heavy weight on the technical aspects of the proposal.
- Utilizing the following pass/fail criteria:
    - Safety records and safety performance.
    - Stabilization/solidification process experience.
    - Radiological waste handling experience.
    - CERCLA experience.
    - Union labor management experience.
    - Radioactive material packaging experience.
- Reduced weight on environmental and quality assurance criteria.
- Limiting the evaluation criteria to a manageable number ensuring that the importance of individual criteria was adequately considered.
- Interviewing past customers of each contractor.

Concerns

Following are concerns that the CAT has with the bid evaluation/vendor selection.

[1] Both the technical review team and the specialty review groups should continue to be involved throughout the selection process.

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The numerical scores (evaluations) of the competing contractors are very close. Without performing a detailed review of the proposals, the CAT is unable to determine whether this close scoring is appropriate. In any case it is troubling that the discrimination between contractors is not more pronounced. As FDF documents lessons learned on this process, it is critical that FDF evaluate the process and determine whether the closeness represents a strength (e.g the contractors were actually close in all areas) or a weakness (e.g. there should have been a clear discriminator between the contractors) of the procurement process.

Evaluation of cost estimates for this particular procurement will prove difficult. The fixed price nature of the contract will not provide FDF with sufficient cost detail to evaluate cost validity. Given this fact, the difficulty of accurately applying the "price realism" criterion in the evaluation becomes difficult. Because of this, and the fact that it is unlikely that FDF will then be able to use its 10% price realism leverage in the process, the CAT believes the evaluation of price in this procurement will not be particularly useful.

The contractors' facility designs have not been developed sufficiently to allow a meaningful FDF evaluation of the design, nor preparation of an accurate cost estimate by the contractors. Because of this, FDF should consider pursuing some level of conceptual design (e.g. define P&IDs, layouts, contamination control, personnel protection) before awarding the final contract. Such information would provide FDF significant advantage in evaluating the work, technical and cost estimates, as well as greatly reducing programmatic uncertainty.

The CAT sees FDF's inclusion of oral presentations as a positive aspect of the procurement process. The CAT is not advocating that the presentations be the equivalent of oral proposals. However, the vendors' oral presentations are going to prove very important to the bid evaluation and contract award process, and could become a discriminating factor given the close scoring of the proposals. Further, the orals likely represent FDF's best source of information in the areas of technology and personnel. To assure a structured process, and identify mechanisms to incorporate the results of the orals into the final evaluations, the following guidelines should be followed by FDF in the oral presenation process:

- Develop a definitive agenda for the oral presentations.
- Requiring personnel responsible for the on site project work to provide the presentations.
- Take the orals seriously. Significant preparation is needed to ensure that FDF's information needs are met. FDF's team should be made up of, and/or supported by, members from each applicable specialty area.
- Craft the orals for maximum flexibility and freedom in obtaining information from the contractors. While procurement senstitivy is important, communication between FDF and the contractors during the oral presenations will be even more important.

•Focus the orals on validating the following: (1) does the information provided support the requirements of the RFP?; (2) does the vendor fully understand the technical challenges and the project?; (3) does the vendor's test results support the waste loading assumptions and flow sheet?

At the time of contract award, the engineering staffs of the contractor and FDF should have an initial in-depth project baseline meeting. This meeting should verify that the parties are in agreement concerning contractor/FDF communication, contract, scope of work, program direction and design approach. The more detail that can be agreed upon during this meeting, the better. FDF must clearly communicate its project requirements and expectations to obtain quality work from the contractor. Ideally, this meeting would aid in establishing an informal basis for continuing communications between the contractor and FDF throughout the contract.

While facility readiness and start up are included as a criterion, the Operational Readiness Review, including configuration management, should have been explicitly highlighted. These particular activities are not only very structured, they are also vital to project success.

The scope of the contract itself raises some concerns. Requiring disposal site acceptance of the waste prior to vendor payment (unless the time exceeds 45 days) could prove troublesome. This approach results in unclear contractor/FDF and FDF/disposer interfaces, as well as being beyond the control of the contractor. An interface control document should be developed that would outline the project's approach to dealing with this and other interface issues.

Productivity of the labor force is another area that could result in contractor claims. Utilization of the site labor force raises many issues (e.g. productivity) which FDF should thoroughly evaluate and resolve in order to minimize the risk of disputes and claims.

Technical Issues

•Retrieval remains the CAT's major concern. The contractors' proposals and the recent difficulties in sampling Silo 3 material only serve to heighten this concern. Requiring at least a limited conceptual design prior to final contract award would allow FDF some leverage in advocating the use of simple and rugged retrieval technologies. In addition to technology, FDF should not overlook the importance of maintenance issues during retrieval as well as the importance (and difficulty) of training operators to operate the retrieval equipment.

•The contractors' proposals appear to be lacking information in the areas of radiation control, instrumentation and control, and an operations and maintenance (O&M) philosophy. Clarification and evaluation of the areas during the oral presentations and the final proposal will be important.

General concerns

•Because this will be a fixed price contract, FDF must ensure that the project proceeds smoothly to avoid serious cost and schedule impacts. Early and open communications with the long list of interested parties is important to maintain project momentum and avoid costly and time consuming discussions, explanations and negotiations. DOE Headquarters, EPA, Ohio EPA, and stakeholders are some of the important parties that FDF must keep engaged.

•FDF must have clear lines of authority and accountability on this project. The legal and contracts organizations appear to be positioning to restrict communication. These organizations are service organizations to the Project Manager. They do have important responsibilities in the success of this project. but should not lose sight of their role as part of the project team.

•The CAT has focused its last several reviews on detailed work related to different aspects of the silos project. During these reviews, the CAT has offered advice pertaining to project management and configuration management issues for the entire OU4 effort. In the next six months, the CAT requests that it be briefed on the overall status of the OU4 program, including cost and schedule status of the several projects, resource availability, near term requirements and milestones, conflicts in resource needs, and perceived and real obstacles to meeting the OU4 mission.

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